INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations).

I. PROJECT INFORMATION

Project Name: Zeneca/Former Stauffer Chemical Company Site (Zeneca Site)

Site Address: 1391 South 49th Street

City: Richmond State: CA Zip Code: 94804 County: Contra Costa

Company Contact Person: Doug Mosteller, Cherokee Fund

Address: 4600 South Ulster Street, Suite 500

City: Denver State: CO Zip Code: 80237 Phone Number: (303) 689-1460

Project Description:
The Department of Toxic Substances Control (DTSC) is considering approval of a Removal Action Workplan (RAW) to complete remediation activities required in portions of East Stege Marsh (ESM) at the Zeneca/Former Stauffer Chemical Site Richmond Facility (Zeneca Site). The RAW has been prepared in accordance with California Health and Safety Code (HSC), Chapter 6.8, Section 25356.1(h)(1).

Project Activities:
If approved, RAW project activities would include:

- Excavation of 0.2 acres of (jurisdictional) wetlands from three discrete areas. Approximately 500 cubic yards of sediment will be excavated using a track-mounted long reach excavator. Excavation of material is expected not to exceed four feet in depth to allow placement of a 3-foot layer of clean cover. Excavation depth must reach sediment or hard pan with sufficient stability to allow placement of clean fill material to avoid the potential for cross contamination from underlying sediment due to pumping. Final excavation depth will be confirmed by the contractor staff using a laser level and a nearby temporary benchmark installed by a registered land surveyor under supervision of the licensed contractor.
- Backfill with approximately 500 cubic yards of clean fill. All of this material currently exists on site and is stored adjacent to the areas to be excavated. No new fill is required to be imported for these areas.
- Placement of excavated sediment in 20 cubic yard-lined covered bins temporarily stored on the Zeneca Site. Excavated sediments are likely to have water content in excess of the appropriate maximum water content allowed for off-site disposal. Therefore, the sediment will be mixed with cement (approximately 10% by weight) to dry out and solidify the sediment before loading for off-site transport. Approximately 10 cubic yards of sediment will be placed in each lined bin. The bin will be closed and transported to the designated cement sediment mixing area. Cement will be mixed into the sediment using an excavator bucket. The closed bins will then be transported to the designated staging area on Lot 1 of the Zeneca Site. The cement will be imported to the Zeneca Site and temporarily stored in the cement addition area in a properly air permitted silo or 100-pound sacks.
- Transportation of sediment after being adequately solidified to Keller Canyon or Altamount Landfill, licensed Class II landfill facilities.
- Decontamination of vehicles and equipment will be conducted in a designated area. Decontamination procedures consist of 1) careful loading of lined bins; 2) closing bins before transport within or outside of the project area (loaded bins will be closed at all times on-site except during cement addition); 3) maintaining haul road clear of sediment to prevent tracking of sediment or soil; 4) inspecting each truck and dry decontaminating trucks and bins with brooms; and 5) using a pressure washer to remove soil and sediment from trucks, bins and tires if dry decontamination techniques are found to be inadequate.

  The decontamination area will be used for the proposed removal action to decontaminate all equipment that has contacted contaminated or potentially contaminated sediments in ESM. The decontamination facility is

constructed of concrete that drains to a trench drain where collected decontamination water, if used, is collected in a sump. This decontamination water will be pumped to an on-site collection tank stored within the decontamination area.

- Restoration of ESM in accordance with approved permits designed to restore and enhance the tidal marsh and transitional upland habitat (Removal Action Workplan, October 2005, Appendix B). This phase will include re-grading the area and replanting. Monitoring and maintenance of the restoration will be completed over a five-year period in accordance with approved plans and permits.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

☐ Initial Permit Issuance	☐ Closure Plan	☒ Removal Action Workplan
☐ Permit Renewal	☐ Regulations	☐ Interim Removal
☐ Permit Modification	☐ Remedial Action Plan	☐ Other (Specify)

Program/ Region Approving Project: Department of Toxic Substances Control
Northern California Coastal Cleanup Operations Branch

DTSC Contact Person: Barbara Cook

Address: 700 Heinz Avenue

City: Berkeley State: CA Zip Code: 94710 Phone Number: (510) 540-2122

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section found to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact."

☒ None Identified	☐ Aesthetics	☐ Agricultural Resources
☐ Air Quality	☐ Biological Resources	☐ Cultural Resources
☐ Geology And Soils	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g.: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

1. Aesthetics

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on-site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.
- Habitat creation and enhancement

Description of Environmental Setting:
The ESM is a 10-acre tidal salt marsh. The marsh is located north of both the San Francisco Bay shoreline and the San Francisco Bay Trail (Bay Trail). The excavation and backfill work will affect only 0.2 acres of the larger ESM. The area north of the marsh is vacant land and has been covered with a temporary cap. Upon completion of the removal of the sediments in the marsh, the area will be graded to the required contours using the adjacent fill material and then replanted. The ESM is currently fenced by a 4-foot high "no climb" fence along the southern and eastern edges of the marsh to isolate the work areas from the Bay Trail users. The fence also prevents Bay Trail users from entering critical habitat areas.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Have a substantial adverse effect on a scenic vista.

The proposed project would not adversely impact scenic vistas. The two public views into the project site are from the Bay Trail along the southern end of the Site and from the Marina Bay Residential Housing complex approximately 0.5 miles southwest from the nearest proposed excavation area.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.

The project site is not visible from a state scenic highway.

c. Substantially degrade the existing visual character or quality of the site and its surroundings.

The removal action activities proposed will be temporary and last less than one month. The tidal marsh will be restored and therefore, the action will not substantially degrade the existing visual character or quality of the project site and its surroundings.

d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Work activities will occur during daylight hours so no new source of substantial light or glare will occur. In the unlikely that work must be conducted during the nighttime, the contractor will comply with City of Richmond – 15.04.840.040 Lighting and Glare Standards. This standard requires no glare onto public streets nor on any other parcel, and requires lights be shielded at lot lines so as to not be directly visible form the adjoining residential district.

Specific References (List a, b, c, etc):

a) Removal Action Workplan, October 2005, Section 2.1
b) Ca Dept. of Transportation, District 4 website:
http://www.dot.ca.gov/hq/LandArch/scenic_highways/ccosta.htm
c) Removal Action Workplan, October 2005, Section 6.3
d) Removal Action Workplan, October 2005, Appendix D, Revised Health and Safety Plan, Environmental and Associated Activities, Section 6.5; Lighting and Glare City of Richmond Ordinance – 15.04.840.040

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact

☒ No Impact

2. Agricultural Resources

Project activities likely to create an impact: None. The project site is located in an urban area and there are no agricultural resources or operations on-site. The proposed project would not convert farmland to nonagricultural use or conflict with zoning for agricultural uses. In addition, Zeneca Inc. granted a perpetual conservation easement to East Bay Regional Park District. Therefore, no further analysis is deemed necessary.

Description of Environmental Setting:

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

b. Conflict with existing zoning or agriculture use, or Williamson Act contract.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

Specific References (list a, b, c, etc):

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

3. Air Quality

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.

Description of Environmental Setting:

The proposed project is located within jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD is responsible for enforcing, within its jurisdiction, air quality standards established by the California Air Resources Board (CARB) and the federal Environmental Protection Agency (U.S. EPA). These air quality standards contain averaging times and threshold concentration levels for certain criteria pollutants that cannot be exceeded by proposed projects.

The BAAQMD falls within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB has been designated by the CARB as being in non-attainment with California Ambient Air Quality Standards (CAAQS) for ozone and PM 10. The U.S. EPA has designated the SFBAAB as being in non-attainment with Federal Ambient Air Quality Standards (FAAQS) for ozone.

Since ozone and PM 10 have been identified as non-attainment in the SFBAAB, specific standards were developed by the BAAQMD to control sources of these pollutants from proposed future projects. Further, because ozone is an identified non-attainment pollutant, standards are also required for ozone precursors such as carbon monoxide (CO) and volatile organic compounds (VOCs). The BAAQMD regulations which have been identified as being potentially applicable include:

Regulations 1, Section 1-301, Public Nuisances – specifies that air contaminants shall not be discharged in sufficient quantity to cause injury, detriment, nuisance, or annoyance to the public.

Regulation 6, Particulate Matter and Visible Emissions – limits the quantity of particulate matter emissions by placing limitation or emissions rates, concentration, visible emissions, and opacity.

Regulations 7, limits odorous substances and specific emissions limitations are placed on certain odorous substances

Regulation 8 limits the emissions of organic pollutants (CO and VOCs)

Regulation 9, Inorganic Gaseous Pollutants, Rule 2, Hydrogen Sulfide limits ground level concentrations of hydrogen sulfide.

Additionally, City of Richmond ordinance 15.04.840.030 prohibits continuous, frequent, or repetitive odors which are perceptible on or beyond the adjacent property lines, and prohibits dust or particulates matter being emitted that is detectable at the property lines.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Conflict with or obstruct implementation of the applicable air quality plan.

Due to the small size and limited duration of the project, implementation will not conflict with the BAAQMD air quality plan. The BAAQMD does not require a detailed air quality analysis for projects generating less than 2000 vehicles trips per day if control measures are implemented. The proposed project has a total of 80 trucks over five days. Dust control measures pursuant to BAAQMD rules and regulations will be instituted during project activities to control construction emissions of particulate matter less than 10 microns in diameter (see subsection c. below). Idling of trucks will also be kept to a minimum during loading operations.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Due to the small size of the proposed project, limited duration of the proposed project, and the dust control measures planned to be implemented during the project, no violations are projected to occur.

c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Additionally, as noted above project activities will be conducted consistent with established regulatory standards at both the state and the federal levels.

The BAAQMD has identified a series of feasible control measures for construction-related activities such as excavation and hauling. The so called “Basic Measures” are designed for project sites less than four acres in size and “Enhanced Measures” for project sites greater than four acres. The present project site area to be excavated is 0.2 acres of marsh/wetlands; therefore, basic control measures will be implemented to further ensure that project activities do not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. These control measures include the following:

- Water all active construction areas at least twice daily, including weekends if necessary.
- Cover all trucks hauling soil, sand, and other loose materials.
- Pave, apply water as necessary, or apply (nontoxic) soil stabilizers to all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (with vacuum/street sweeper) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (with a vacuum/street sweeper) if visible soil material is carried onto adjacent public streets.

Wet materials (such as marsh sediments) will not likely generate dust; they will be excavated and loaded into lined bins without the use of water spraying equipment. Additional control measures to be done include suspending excavation and grading activity when winds (sustained) exceed 15 mph and truck speeds must be 15 mph or less.

Based upon compliance with the above noted regulatory controls and incorporation of feasible control measures for construction emissions of PM 10 into the project, the proposed project will not conflict with or obstruct implementation of the applicable air quality plan for the region.

d. Expose sensitive receptors to substantial pollutant concentrations.

ESM is a 10-acrea tidal salt marsh located in the southern portion of the Site. The Bay Trail is located on the southern boundary of the marsh which is used by many nearby residential and business people during the day and weekends. Marina Bay, a residential complex is located approximately 0.5 miles southwest from the closest excavation area within ESM. As noted above, dust control measures will be applied throughout implementation of project activities consistent with established measures set forth by the BAAQMD to ensure that the relative impact to air quality will be kept at less than significant to no impact levels.

e. Create objectionable odors affecting a substantial number of people.

Odorous substances are regulated by the BAAQMD under Regulation 7 and under City of Richmond ordinance. Controls to meet these requirements will be made part of the project. Because the excavation will occur in a tidal marsh, naturally occurring hydrogen sulfide may be emitted. The amount of sediments to be removed is approximately 500 cubic yards and past actions have shown limited detection of hydrogen sulfide.

Petroleum products (gasoline and diesel) may be brought on-site to power subcontractor vehicles and equipment. The on-site fueling operations for small power equipment and vehicles will be conducted outdoors in a well-ventilated area; therefore, it is not anticipated that odors will have an impact on workers or the surrounding community.

f. Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).

Although there are recorded occurrences of naturally occurring asbestos around the City of Richmond, none have been found to occur on the subject project ESM.

Specific References (list a, b, c, etc):

a) Removal Action Workplan, October 2005, Section 9.0, Removal Action Implementation; BAAQMD, Regulation 2, 6, 7, 8, 9; BAAQMD Hand Book on CEQA Guidelines 1999 p 24; telephone discussion with Doug Kolozsvari of BAAQMD, September 15, 2005.
b) Ibid.
c) Ibid.
d) Ibid.
e) BAAQMD Regulation 7, Removal Action Workplan, October 2005, Section 9.0
f) BAAQMD link to California Air Resources Board, Link to Department of Conservation, Geological Survey, Governor's Office of Planning and Research, "Addressing Naturally Occurring Asbestos in CEQA Documents."

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

4. Biological Resources

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Grading the excavated areas with clean fill located adjacent to the excavation point.
- Habitat creation and enhancement

Description of Environmental Setting:

The ESM is an approximately 10-acre tidal salt marsh area located in the southern portion of the Zeneca Site. Previous studies done on the Site indicate that ESM plant communities are similar to other tidal marshes in San Francisco Bay. The marsh plant community is dominated by halophytes such as saltgrass (*Distichlis spicata*) and pickleweed (*Salicornia virginica*), with patches of Pacific cordgrass (S*partina foliosa*) and rush (*Juncus sp.*). Coastal tidal salt marsh constitutes most of the existing habitat at ESM. The distribution of marsh vegetation and associated habitat zonation is influenced by elevation, proximity to tidal channels, salinity, substrate conditions and other site-specific factors. Because marsh habitat and vegetation is a function of many factors, the plants for each habitat zone intergrade and/or overlap into the adjacent zone.

Fauna at ESM and adjacent upland habitats include birds, fish, invertebrates, and mammals that typically use the tidal salt marsh habitats and the adjacent uplands of the San Francisco Bay estuary. Flora at ESM and adjacent upland habitats include native plants and algae also typical of the tidal salt marsh habitats of the San Francisco Bay estuary. The adjacent uplands support ruderal vegetation that includes native and non-native plants. The plant community surrounding the freshwater lagoons is typical of freshwater riparian vegetation in the central coast of California and is composed primarily of willow (*Salix sp.*). Existing habitat types/zones are summarized in the RAW, Appendix B.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

   The remediation of ESM would result in the temporary disturbance and loss of occupied and potential California clapper rail habitat within the Habitat Enhancement Area (HEA). About 0.2 acres of tidal marsh habitat currently available to California clapper rails would be temporarily disturbed and lost by remediation work. Existing on-site fill material would be used to backfill excavated areas. It is expected it will take one month to complete this remediation. This area would be restored to tidal marsh upon completion of remediation work. The habitat areas to be impacted are currently contaminated and the remediation plan identifies levels of selenium and lead that may present risks to California clapper rails. Therefore, remediation of contaminants in the HEA is likely to benefit California clapper rails by removing contaminants of concern which likely reduce the quality of habitat for reproduction, sheltering and feeding. Restoration is believed to likely result in the establishment of higher quality habitat than currently exists in the habitat areas within the HEA. California clapper rails would benefit from the overall remediation and restoration of tidal marsh habitat and the creation of additional acres of suitable California clapper rail habitat. Because the impacted tidal wetlands are being restored in-situ, it is anticipated that restoration of these wetlands would occur fairly rapidly, approximately five years.

   California clapper rails could be harmed if tidal marsh habitat impacted by the proposed remediation and restoration activities is colonized by non-native, invasive plant species, especially *Lepidium* and non-native *Spartina* species. The proposed excavation and grading of habitat areas within the HEA could result in the invasion of these non-native plant species. If established within the proposed tidal marsh restoration areas, these non-native plant species could limit the habitat value of these areas for California clapper rails. Successful implementation of the proposed habitat restoration and monitoring plan could prevent establishment of non-native, invasive species and ensure that habitat values for California clapper rails within the restored areas are maximized.

   Work activities within and near California clapper rail habitat areas in the HEA would occur during the non-breeding season between September 1 and January 31. Work activities conducted during the California clapper rail non-breeding could result in harassment, harm, or mortality of California clapper rails that occur in the HEA. The California clapper rails could be forced to adjust the boundaries of their territories within the HEA or to disperse to other habitat areas within this area or to other nearby tidal marshes.

   Further, some work activities (i.e. surface water, sediment, and biological monitoring) could occur in and near habitat areas during the breeding season from February 1 through August 31. Although certain precautions would be followed if work needs to be performed in these areas during the breeding season, according to the U.S. Fish and

Wildlife Service, these activities still could result in harassment, injury, or mortality of California clapper rails. Disturbances associated with work activities in the HEA could harass nesting California clapper rails. Disturbances from work activities could cause individual California clapper rails to abandon their nests or reduce the ability of adults to properly care for their eggs or young. To avoid or minimize disturbance effects to breeding California clapper rails, the project proponent will have a qualified biologist accompany work crews into habitat areas. If nesting California clapper rails are determined to be present, work activities would be rescheduled unless the work can be conducted in such a manner to avoid any potential disturbance to nesting California clapper rails.

Based upon consultation with the U.S. Fish and Wildlife Service, it has been determined that the proposed RAW is not likely to jeopardize the continued existence of California clapper rail. This determination was based upon the following factors:

1. the contaminated condition of the tidal wetland habitat present within the HEA which likely currently presents risks to California clapper rail survival and reproduction;
2. the temporary loss of a limited amount (i.e. 0.2 acres) of habitat;
3. the low numbers (one pair) of California clapper rails that likely would be harassed, harmed, or killed; and
4. the improved habitat conditions of 4.0 acres of restored tidal wetlands and addition of 3.5 acres of created tidal wetlands for California clapper rails based upon the overall habitat enhancement project

No critical habitat has been designated for the California clapper rail, therefore none will be affected.

Incidental Take

Section 9(a)(1) of the Federal Endangered Species Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this definition.

The incidental take statement accompanying this biological opinion exempts take of the California clapper rail carried out in accordance with the following reasonable and prudent measures and terms and conditions from the prohibitions contained in section 9 of the Endangered Species Act. The measures described below are non-discretionary and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant as appropriate in order for the exemption in section 7(o)(2) to apply.

Reasonable and Prudent Measure

1. Minimize the potential for harassment, harm, or killing of California clapper rails.
2. Minimize the impacts of the temporal loss and degradation of habitat on California clapper rails.

Terms and Conditions

- All work or activities within the HEA shall not be conducted from February 1 through August 31 within any given year. Project work or activities may occur within the restricted area within the California clapper rail breeding season provided that a U.S. Fish and Wildlife Service approved survey is conducted and provided for review. Depending on the survey results and other specific conditions, the U.S. Fish and Wildlife Service may allow project work to be conducted between mid-January and mid-April.
- A U.S. Fish and Wildlife Service-approved biologist shall be onsite during all of the remediation and restoration work within California clapper rail habitat in the HEA. The onsite biologist shall have the authority to stop all work if deemed necessary. The U.S. Fish and Wildlife Service shall be notified within 24 hours of any work stoppages and the reasons why. Prior to the initiation of the remediation and restoration work, the onsite biologist shall conduct a training session for all work crew personnel. The training shall include a description of the California clapper rail and its habitat, identification of California clapper rail calls, conservation measures being implemented as part of the project, and the boundaries of the work area.
- The project proponent shall develop a final restoration and monitoring plan which will specifically address control of non-native species, including *Lepidium* and non-native *Spartina* species.

For additional information concerning the U.S. Fish and Wildlife Service's opinion and conditions for the incidental take of California clapper rail, please refer to the RAW, U.S. Fish and Wildlife Service, Biological Opinion, Appendix B, Attachment 6, "California Department of Fish and Game, California Clapper Rail Habitat Requirements."

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Please see above analysis in subsection (a).

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

As noted in subsection (a) the remediation of ESM would result in the temporary disturbance and loss of occupied and potential California clapper rail habitat. Additionally, other vegetation that makes up the marsh plan community (see Biological Impact Setting above) will be temporarily impacted through proposed remediation activities. However, the proposed project incorporates restoration of the ESM (see RAW, Appendix B, "Habitat Enhancement Plan for the Marshland Portion of Meade Street Operable Unit, Subunit 1") and habitat enhancement. Plant research performed for the Marshland Portion of Meade Street Operable Unit, including the ESM, determined that *Spartina alterniflora* is spreading in the San Francisco Bay estuary. The native *S. foliosa*, which are good habitat for the California clapper rail and other native salt marsh species, is threatened by the vigorous spread of this species. The introduction of this species and/or its hybrids commonly referred to as "exotic cordgrass," has a different growth form; it forms extremely dense stands and may occupy a greater vertical range (both higher and lower) than the native species. Consequently, there is concern that spread of the exotic cordgrass could lead to local extinction of the native species and habitat changes that could not only threaten sensitive species but also alter the character of the San Francisco Bay. Management recommendations for the exotic cordgrass includes control efforts (extirpation and selective removal) and curtailing opening new areas of unvegetated mud, particularly in infested areas, because new populations are likely to contain large numbers of hybrids. The proposed planting program is intended to avoid any new establishment of additional non-native exotic plant species throughout the HEA. Therefore, although there will be temporary disturbance and removal of the ESM, the proposed project incorporates restoration of any damaged areas and removal of plant species that could threaten native flora.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

There are no known native resident or migratory fish or wildlife species in the ESM area. Endangered species that inhabit the area have been identified. Species in and around the project site have been identified and are included in the RAW.

e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

There are no applicable local policies or ordinances protecting biological resources. As noted in this section, applicable requirements at the state and federal level are being met.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Specific consultation with the U.S. Fish and Wildlife Service was done in preparation of the RAW. The information and recommendations obtained through this process were used as a basis for conducting this Initial Study analysis. Please refer to the RAW for in depth information regarding applicable rules, regulations, opinions and permits required prior to and during implementation of proposed project activities.

Specific References (list a, b, c, etc):

(a) Removal Action Workplan, October 2005, Appendix B, "Habitat Enhancement Plan for the Marshland Portion of Meade Street Operable Unit, Subunit 1," pp. 1-37; Appendix B - Attachment 6, "California Department of Fish and Game, California Clapper Rail Habitat Requirements," U.S. Fish and Wildlife Section 7 Letter, p. 8; Federal Endangered Species Act; California Natural Diversity Data Base, 2004, Rarefind Report.
(b) Ibid.
(c) Ibid.
(d) Removal Action Workplan, October 2005, Appendix B, "Habitat Enhancement Plan for the Marshland Portion of Meade Street Operable Unit, Subunit 1"; Appendix B - Attachment 4; and Natural Diversity Data Base, 2004, Rarefind report
(e) Ibid.
(f) Removal Action Workplan, October 2005, Appendix B - Attachment 6, "California Department of Fish and Game, California Clapper Rail Habitat Requirements."
(g) Removal Action Workplan, October 2005, Appendix B, "Habitat Enhancement Plan for the Marshland Portion of Meade Street Operable Unit, Subunit 1," pp. 1-37; Appendix B - Attachment 6, "California Department of Fish and Game, California Clapper Rail Habitat Requirements," U.S. Fish and Wildlife Section 7 Letter, p. 8; Federal Endangered Species Act; California Natural Diversity Data Base, 2004, Rarefind Report.
(h) Ibid.
(i) Ibid.
(j) Removal Action Workplan, October 2005, Appendix B, "Habitat Enhancement Plan for the Marshland Portion of Meade Street Operable Unit, Subunit 1"; Appendix B - Attachment 4; and Natural Diversity Data Base, 2004, Rarefind report
(k) Ibid.
(l) Removal Action Workplan, October 2005, Appendix B - Attachment 6, "California Department of Fish and Game, California Clapper Rail Habitat Requirements."

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

5. Cultural Resources

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Grading the excavated areas with clean fill located adjacent to the excavation point.
- Habitat creation and enhancement

Description of Environmental Setting:

Prior to 1900, the project site was part of the San Francisco Bay. ESM began accreting (the buildup of land from natural forces such as wind or water) around 1900 and this sedimentation accelerated after the construction of the Southern Pacific railroad spur embankment south of the Site in the late 1950s. The high intertidal marsh vegetation was primarily established after 1960. The majority of the sediment in the marsh is therefore likely to be sediment transported via Carlson Creek or Meeker Slough or from San Francisco Bay. Ownership of the railroad spur was subsequently transferred to EBRPD. Following this transfer, the embankment was paved and is now part of the EBRPD Bay Trail System. The project proposes to remove only sediment resulting from this filling process and backfill it with clean fill.

In an effort to address potential impacts as they relate to Cultural Resources in and around the ESM, the Native American Heritage Commission (NAHC) was contacted and provided information for purposes of conducting a search of their sacred land file system. The NAHC search did not reveal the presence of Native American cultural resources in the immediate project area; however, the Department did receive a listing of potentially interested Native American individuals/organizations that may have knowledge of cultural resources in and around the project area. A letter has been drafted inviting their participation and input as we progress through the California Environmental Quality Act (CEQA) process. The letter will be sent commensurate with the public comment period. Additionally, after consultation with the City of Richmond it was determined that the City had no record of any resources of historical or cultural significance at the Zeneca site.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.

Based upon information received from the NAHC and the City of Richmond, there are no records that indicate the presence of historical or cultural significance on the project site. However, evidence and other information may be presented by interested Native American individuals/organizations during the public comment phase of the process concerning ESM. The Department is committed to working with these individuals/organizations to address and resolve any issues concerning potential impacts to cultural resources on the project site and revising the RAW accordingly.

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

Please see the Setting and the response in subsection (a).

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Please see the Setting and response in subsection (a).

d. Disturb any human remains, including those interred outside of formal cemeteries.

Please see the Setting and response in subsection (a).

Specific References (list a, b, c, etc):

- Native American Heritage Commission, letter dated August 2, 2005
- City of Richmond, Richard Mitchell, August 16, 2005
- Removal Action Workplan, October 2005, Section 1

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

6. Geology and Soils

Project activities likely to create an impact:
Project Activities:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.

Description of Environmental Setting: The project site is a tidal salt marsh. The majority of the sediments in ESM are likely to be sediments transported via Carlson Creek, Meeker Slough or from the San Francisco Bay. The bay sediments are primarily comprised of fine-grained silty sand with smaller amounts of mud and peat. The site geology consists of alluvial sediments that were deposited from the Berkeley Hills, located east and northeast of the Site.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).

  The closest known active fault to the project site is the Hayward fault, which is a northwest-striking right lateral strike-slip fault of the San Andreas system. It is generally along the western margin of the hills east of the San Francisco Bay and parallel to the axis of the Bay. The Hayward fault is the closest mapped Holocene fault to the project site and is zoned under the Alquist-Priolo Special Studies Zone Act. The project site is located approximately 2 miles outside of the Special Studies Zone.

- Strong seismic ground shaking. DTSC's project does not involve construction of structures that could impact people during strong seismic ground shaking.

- Seismic-related ground failure, including liquefaction. In the marsh, the material underlying the soft surface clay is clayey or silty with minor amounts of sand. Therefore it is concluded that the impacts due to potential liquefaction is low.

- Landslides. ESM and the surrounding area are flat; so there is no landslide susceptibility.

b. Result in substantial soil erosion or the loss of topsoil.

   The ESM is a tidal salt marsh habitat. As noted in the Project Description, proposed project activities include excavation of contaminated sediment with backfill of clean soil and restoration of wetland vegetation. Therefore, no substantial soil erosion or loss of topsoil will occur as a result of implementing the proposed project.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

   The ESM is a tidal salt marsh habitat. The area is flat. As noted in the Project Description, proposed project activities include excavation of contaminated sediment with backfill of clean soil and restoration of wetland vegetation. Therefore, the site soils will not be subject to on or off-site landslide, lateral spreading, subsidence or collapse. Liquefaction could occur if there is a significant earthquake on the Hayward fault. However, sand layers are not a significant component of the surface soils. The material underlying the soft surface clayey is clayey or silty with minor amounts of sands. Therefore, it is concluded that impacts due to potential liquefaction are less than significant.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

   As noted in the Project Description, proposed project activities include excavation of contaminated sediment, backfill with clean soil, restoration of wetland vegetation, and no buildings will be constructed on the project site. Therefore, the proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of water.

   The proposed project does not involve installation or use of septic tanks. The surrounding area is currently connected to the local municipal water supply and sewer system; therefore, there is no need for site conditions to support a septic or alternative waste water system.

f. Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).

   As noted in the Air Quality section, occurrences of naturally occurring asbestos have been recorded around the City of Richmond but not in and around the ESM site. Therefore, there it is concluded that there is no impact as it relates to naturally occurring asbestos.

Specific References (list a, b, c, etc):

a) City of Richmond General Plan, Vol. Two, Technical Appendix, August 1994; Removal Action Work Plan, United States Geologic Survey, http://wrgis.wr.usgs.gov/
b) Removal Action Workplan, October 2005, Introduction p. 1; Removal Action Workplan, Appendix B – Habitat

Enhancement Plan
c) Removal Action Workplan, October 2005, Section 6; Removal Action Workplan, Appendix B – Habitat Enhancement Plan**;** United States Geologic Survey, http://wrgis.wr.usgs.gov/
d) Removal Action Workplan, October 2005, Section 6; Removal Action Workplan, Appendix B – Habitat Enhancement Plan
e) Removal Action Workplan, October 2005, Section 2
f) BAAQMD link to California Air Resources Board, Link to Department of Conservation, Geological Survey, Governor's Office of Planning and Research, "Addressing Naturally Occurring Asbestos in CEQA Documents."

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

7. Hazards and Hazardous Materials

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.
- Habitat creation and enhancement

Description of Environmental Setting:

Investigations conducted at the ESM found elevated concentrations of arsenic, copper, lead, nickel, zinc, selenium, mercury, and cadmium present in the marsh sediments. In the western portion of the ESM, elevated concentrations of arsenic, cadmium, copper, nickel, selenium, and zinc were likely related to historic groundwater discharge and overland flows to the marsh area. Additionally, a variety of pesticides were detected in sediment and pore water samples taken from the marsh area (See RAW, "Source, Nature, and Extent of Contamination," pp 8-11 for a complete listing of the pesticides).

The volatile organic compounds (VOCs) carbon disulfide, tetrachloroethene, and acetone were detected infrequently and at low concentrations in ESM sediments. VOCs were not determined to be a risk driver in ESM based upon the ecological risk assessment. Carbon disulfide and tetrachloroethene "hot spots" were identified in the upland portion of the Zeneca Site and these contaminants may have been historically transported to ESM via historical groundwater or surface water discharge.

Various PCBs were detected infrequently at low concentrations in sediment samples from ESM. PCBs were never produced at the Zeneca Site and were not detected frequently or at high concentrations in the upland portion of the Zeneca Site. Adjacent sites are recognized to have discharged PCBs to San Francisco Bay and PCBs are also recognized to have contaminated much of San Francisco Bay sediments at low concentrations.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

   To minimize the potential impacts to public health and safety throughout the proposed project implementation, the following safety measures will be incorporated into project activities:

   Wheel Cleaning

   A wheel cleaning system referred to as "Trackclean" will be installed just before each stabilized construction entrance. The wheel cleaning system consists of a series of longitudinal bars strategically placed to produce a vibration and flexing of tires as the truck drives over them. The wheel cleaning system will dislodge the large globules of mud from

the tires, and the Stabilized Construction Entrance will remove the remaining dislodged soil/mud (See RAW, "Soil Management, Dust Control Measures, and Site Access," figure 2). In addition, trucks and bins will be dry decontaminated with brooms. As necessary, a pressure washer will be used to remove soil and sediment from trucks, bins and tires.

Haul Roads

Trucks will travel on the paved portions of S. 47th, E. Montgomery Street and S. 48th Street, and along the unpaved portion of S. 48th Street to ESM. At ESM, the marsh sediments will be transferred into covered bins and taken by truck along the haul route to a cement mixing area along S. 48th Street. After mixing, the bins will be transferred to the bin staging area located at the corner of E. Montgomery Street and S. 47th Street. The haul roads have been improved by placing a layer of aggregate base rock in areas where the asphalt road along S. 48th Street has deteriorated; placing asphalt grindings in areas across S. 47th Street where the asphalt has deteriorated; dragging and roughing the existing stabilized roadway along S. 48th Street where the roadway transitions from asphalt pavement to gravel; providing barricades to route truck drivers away from poor conditions on roadways; and re-routing of out going traffic through the northern parking lot to reduce driving over poor road surfaces on E. Montgomery and S. 47th streets.

Coverage of Truck Loads

As noted in the Air Quality section, BAAQMD Control Measures will be implemented to address the concern of soil being released from the trucks. All loads exporting excavated sediment from the ESM will be covered prior to leaving the site.

Street Sweeping

The use of street sweeper or vacuum truck will meet BAAQMD and the City of Richmond control measures. The daily frequency will be largely determined by the number of trucks entering and leaving the site and visual signs of off-site tracking. For days with heavy truck traffic, a full-time street sweeper or vacuum truck will be required for the primary hauling routes.

Truck traffic will be restricted to designated traffic routes. During hauling periods, street sweeping of S. 48th, S. 47th and Meade Streets will be included. Sweeping of off-site streets will cease once hauling activities are completed. On days when truck traffic is lighter, the condition of the traffic routes will be monitored and street sweeping of these routes will be conducted immediately following scheduled loads of materials and more frequently as needed.

As previously noted, the off-site tracking of soil will be controlled through the rocking of primary haul roadways, the installation of wheel cleaning systems, the installation of stabilized construction entrances, and the application of water onto roadways. Water trucks may be used in conjunction with street sweeping/vacuuming on primary traffic routes if standard street sweeping/vacuuming is not effective in removing tracked soil. As part of mobilization activities, storm drains will be protected to control potential water runoff from street sweeping.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Off-site impacts could potentially be related to windblown dust beyond the immediate work area, excessive tracking of soil, or an exceedance of air quality objectives. Contingency actions have been established for dust/air quality, soil tracking and unforeseen conditions as follows:

- A construction manager will be continuously monitoring the work zone and will direct the remediation contractor to provide enhanced dust control measures when standard measures are not fully effective. Such measures will include additional spraying of water and possibly binding agents onto the material or area that is generating dust. Operations will be temporarily suspended until the enhanced dust control measures can be implemented. If sustained winds exceed 15 mph, potential dust-generating activities will be suspended. The winds will be monitored and work will resume when the sustained winds are below 15 mph or upon further evaluation and agreement by DTSC.

- In the event that air monitoring action levels are reached operations will cease and dust/vapor suppression efforts will be enhanced.

- If an unforeseen condition is experienced during the remediation project that could potentially result in an off-site impact, operations related to the unforeseen condition will be promptly suspended until the condition can be reviewed with DTSC and other qualified parties. The potential impact of the unforeseen condition will be evaluated and necessary measures will be implemented to address the concern.

- During the site specific and daily safety meetings, site workers will be trained in and reminded of provisions of the emergency response plan, the communication systems, and evacuation routes. In addition, emergency response plan details will be discussed as necessary at the daily safety briefings. Emergencies that may occur at the site may include accidental releases of gases, chemical spills, fires, explosions and personal injuries (See RAW, Appendix D, "Health and Safety Plan.")

- If a hazardous material spill occurs, site personnel should locate the source of the spill and determine the hazard to the health and safety of site workers and the public. The following procedures would be implemented:

  - Attempt to stop or reduce the flow if it can be done without risk to personnel
  - Isolate the spill area and do not allow entry by unauthorized personnel
  - De-energize sources of ignition within 100 feet of the spill, including vehicle engines.

  Should a spill be of the nature or extend that it cannot be safely contained, or poses an imminent threat to human health or the environment, an emergency cleanup contractor will be called out as soon as possible. Spill containment measures listed below are examples of responses to spills:

  - Right or rotate containers to stop the flow of liquids. This step may be accomplished as soon as the spill or leak occurs, providing it is safe to do so.
  - Sorbent pads, booms, or adjacent soil may be used to dike or berm materials, subject to flow, and to solidify liquids.
  - Sorbent pads, soil, or booms, if used, shall be placed in appropriate containers after use, pending disposal.
  - Contaminated tools and equipment shall be collected for subsequent cleaning or disposal.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

   Perimeter air monitoring will be conducted at the site to monitor for chemicals of concern. The data will be evaluated based upon human health risk-based action levels calculated for an adult and child exposure scenarios. Dust control measures, described in Section 3 above, incorporate Bay Area Air Quality Management District requirements. Therefore, any emissions will be less than significant.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment.

   The Zeneca Site is located in CalSites as an Annual Workplan Project and thus is on a list of sites compiled pursuant to Government Code Section 65962.5. The Zeneca Site is listed on DTSC's Hazardous Waste and Substances Site List with the identification number 7280002. However, the remediation project as described throughout this Initial Study would not create a significant hazard to the public or the environment.

e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

   Proposed project activities will occur on-site and not significantly interfere with access to the Zeneca Site or neighboring properties. As noted in subsection (b), the RAW contains emergency response plans as part of the overall Health and Safety Plan developed for the project. Therefore, project activities will not interfere with established safety and security measures.

Specific References (list a, b, c, etc):

a) Removal Action Workplan, October 2005, Section 9; Removal Action Workplan, Appendix C – Remedial Design Details Addendum, Soil Management and Dust Control, pages 2 – 7

b) Removal Action Workplan, October 2005, Sections 9.6 and 9.7; Appendix D, Health and Safety Plan – Section 9; Appendix E, Air Monitoring Plan.

c) Removal Action Workplan, October 2005, Appendix E, Air Monitoring Plan.
d) CalSites list, Department of Toxic Substances Control, Site Mitigation and Brownfields Reuse Program Data Base
e) Removal Action Workplan, October 2005, Appendix C - Soil Management and Dust Control, pp. 2-8; and Appendix D – Health and Safety Plan.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

8. Hydrology and Water Quality

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.
- Habitat creation and enhancement

Description of Environmental Setting:

The ESM is located within the East Bay Plain groundwater basin. Upland groundwater flow is generally to the south, toward San Francisco Bay. Site investigations encountered two coarse-grained, water-bearing units in the Quaternary Alluvium above the Yerba Buena Mud. These two units were identified as the Upper and Lower Horizon water bearing zones. Underlying Lot 3 of the Zeneca Site, adjacent to ESM, the upper and lower horizons are generally separated by a silty clay layer of varying thickness.

The Upper Horizon (shallower water-bearing unit), is typically found at depths ranging from approximately 5 feet below ground surface (10 feet mean sea level(msl)) to 15 feet bgs (-5 feet msl; based on pre-remediation site grades). Borings drilled into the Upper Horizon generally encountered one or more intervals of sands and silts ranging from 1 to 8 feet in thickness. The sand and silt units within the Upper Horizon do not appear to be continuous laterally across Lot 3. A portion of the Upper Horizon groundwater apparently discharges to ESM, as evidenced by the iron hydroxides that had precipitated into the northwestern portion of ESM before remediation on the adjacent Lot 3. Groundwater seeps are currently visible along the northern/upland boundary of the ESM where fill has not yet been placed to designed depth.

In addition to groundwater influx to ESM, freshwater enters the marsh through direct rainfall, runoff from adjacent upland areas, storm-water runoff through Outfall 002 located on the northern edge of ESM and storm-water runoff through Outfall 001 that has been directed through the freshwater lagoons. Water from Carlson Creek may also enter ESM as it flows through the culvert and mixes with the incoming tides.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Violate any water quality standards or waste discharge requirements.

Overflows from Outfall 001 and Outfall 002 were previously regulated by a National Pollutant Discharge Elimination System (NPDES) permit that was issued to the former Stauffer Chemical Company. The NPDES permit was rescinded by the RWQCB on November 20, 2002 because manufacturing activities had ceased in 1997.

In 2002, as part of the upland remediation, a new storm drain was installed underneath the levee between the fresh water lagoons and the three culverts were replaced with two new corrugated iron overflow culverts set at the identical elevation as the removed pipes. The new storm-water management system has two outfalls, Outfall 001 and Outfall 002, which discharge to ESM and Outfall 003, which discharges directly to San Francisco Bay. Outfall 001 is located at the Lower Lagoon near Carlson Creek. Outfall 002 is located between the lagoons. Storm-water runoff from the Zeneca Site is directed to the Upper Lagoon through the upland Low-Flow Intercept System (LFIS), which is designed

to capture first flush rainfall water. Approximately 75 to 85 percent of the storm water from the Zeneca Site is directed to the Upper Lagoon through the LFIS. A discharge through the outfalls will occur only when the pumping capacity of the LFIS is exceeded.

Storm-water monitoring is conducted in accordance with the Comprehensive Monitoring Plan (CMP) for the Zeneca Site. Under the CMP, storm-water samples are collected from each outfall during the first storm event of any given month that there is a discharge to ESM or San Francisco Bay from that outfall. Storm-water results are reported with quarterly groundwater monitoring results in quarterly reports submitted to the DTSC and RWQCB.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

The only groundwater extraction proposed by the project would be as part of the routine groundwater monitoring program. The amount of water withdrawn while sampling these wells will be very small. Therefore, the proposed project activities are not anticipated to deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

The hydrological and topography/sedimentation goals of ESM enhancement are to 1) maintain the existing functional tidal hydrology and freshwater inflow in the ESMA area as a whole; 2) establish new functional tidal hydrology in created low, middle, and high marsh areas; 3) maintain surface-water inflows to ESM; 4) maintain existing ESM channel configuration through design; support natural processes of erosion/degradation/sedimentation in the intertidal marsh channel habitat; 5) in the middle and high marsh habitat areas maintain current accretion rates and minimize erosion/degradation; and 6) in the upland transition area, establish stable new slope configuration and minimize erosion/degradation in the upland transition area.

The overall ESM enhancement project proposes to maintain the existing hydraulic regime. A detailed study of the tidal regime at Stege Marsh was conducted and was used as a guideline to maintain the existing hydraulic regime after completion of the marsh enhancement measures. After completion of enhancement measures, the general wetland hydrology criterion (inundation up to the soil surface from at least 10 to 15 percent of the growing season or 37 to 55 days) during an average rainfall year will be evaluated using staff gauges, data loggers on site and/or periodic monitoring to observe and document ongoing inundation depths and extent.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

Please see subsection c. above.

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

As noted in the Setting for this section and in subsection (a), in 2002, as part of the upland remediation, a new storm drain was installed underneath the levee between the lagoons and the three culverts were replaced with two new corrugated iron overflow culverts set at the identical elevation as the removed pipes. The new storm-water management system has two outfalls, Outfall 001 and Outfall 002, which discharge to ESM and Outfall 003, which discharges directly to San Francisco Bay. Outfall 001 is located at the Lower Lagoon near Carlson Creek. Outfall 002 is located between the lagoons. Storm-water runoff from the Zeneca Site is directed to the Upper Lagoon through the upland Low-Flow Intercept System (LFIS), which is designed to capture first flush rainfall water. Approximately 75 to 85 percent of the storm water from the Zeneca Site is directed to the Upper Lagoon through the LFIS. A discharge through the outfalls will occur only when the pumping capacity of the LFIS is exceeded.

f. Otherwise substantially degrade water quality.

As noted throughout this section, the proposed remediation involves the removal of contaminated sediment with backfilling of clean soil and restoration of the marsh. It is not anticipated that the proposed project, given the remediation to adjacent areas around the proposed project site and the new storm drain installation would result in any significant impacts.

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

Proposed project activities do not include construction of any structures.

h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

As discussed in subsection c. above, the overall ESM enhancement project proposes to maintain the existing hydraulic regime of the marsh. The existing levees will not be disturbed during the proposed excavations.

i. Inundation by sieche, tsunami or mudflow.

Site geology consists primarily of alluvial sediments that were deposited at the Zeneca Site from the Berkeley Hills, located east and northeast of the Zeneca Site. Given the low elevation and proximity to the San Francisco Bay, it is possible that a sieche or tsunami could impact the project site. However, as noted in the Hazards and Hazardous Waste Section of this Initial Study, there is a Health and Safety Plan that is part of the proposed project, all measures would be followed in the event of such an emergency.

Specific References (list a, b, c, etc):

a) Removal Action Workplan, October 2005, Section 2.5.1
b) Removal Action Workplan, October 2005, Sections 2.5.1 and 3.2.3
c) Removal Action Workplan, October 2005, Appendix B – Habitat Enhancement Plan, Sections 2.0 and 3.2
d) Ibid
e) Ibid
f) Ibid
g) Removal Action Workplan, October 2005
h) Removal Action Workplan, October 2005, Appendix B – Habitat Enhancement Plan, Sections 2.0 and 3.2
i) Removal Action Work Plan October 2005, Appendix D - Health and Safety Plan

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

9. Land Use and Planning

Project activities likely to create an impact: Restoration of Habitat

Description of Environmental Setting: The ESM is an approximately 10-acre tidal marsh partly on East Bay Regional Park District property, north of the San Francisco Bay shoreline. Additionally, as a condition to completing the remediation work on EBRPD property, Zeneca Inc. granted a perpetual conservation easement over the portions of the HEA that are not on EBRPD property. The conservation easement was granted to EBRPD.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Appropriate permits have been obtained from the U.S. Army Corps of Engineers (USACE) and the Bay Conservation and Development Commission (BCDC). Additionally, there are location specific applicable rules and regulations

spanning a number of federal and state regulatory agencies that are location-specific, and which establish certain restrictions and otherwise compliance as it relates to the conduct of the proposed project activities. Specific locations include flood plains, wetlands, historic places and sensitive ecosystems or habitats. Other rules and regulations are considered action-specific, meaning technology or activity-based requirements or limitations on actions taken with respect to hazardous wastes that also require compliance as part of the approval of the RAW. The RAW will be implemented in compliance with these rules and regulations, therefore; the project activities will not conflict with any applicable habitat conservation plan or natural community conservation plan.

b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

See discussion above in subsection (a).

Specific References (list a, b, c, etc):

a) Draft Removal Action Workplan, October 2005, Appendix B
b) Ibid.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

10. Mineral Resources

Project activities likely to create an impact: None. There are no known minerals on the proposed project site, therefore no analysis is deemed necessary.

Description of Environmental Setting:

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Specific References (list a, b, c, etc):

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

11. Noise

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.

Description of Environmental Setting:

The ESM is an approximate 10 acre tidal marsh partly on East Bay Regional Park District property, north of the San Francisco Bay shoreline. ESM is currently fenced by a 4-foot-high park fence along the southern and eastern edges of the Habitat Enhancement Area to isolate the work area from park users. Currently, the sources of noise around the proposed project site are various businesses not associated with the subject project. The nearest residential area is 0.5 miles to the southwest from the nearest excavation point. The City of Richmond established temporary noise generating activity standards for industrial and commercial areas of 85 dBA for maximum sound levels for short-term operations (period less than 15 days) of mobile equipment for work activities that occur between weekdays, 7 a.m. to 7 p.m.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

   As noted in the Setting portion of this section, the City of Richmond has set temporary noise generating standards. The proposed project is expected to last for approximately one week. California Occupational Health and Safety Agency (Cal/OSHA) sets the permissible exposure limits (PELs) and time weighted averages (TWAs) at 90 decibels for an eight-hour day if hearing protection were not employed. However, workers implementing the proposed project will wear ear protection as part of the Health and Safety Plan for the proposed project site. Ear protection will be required for workers when working within 25 feet of excavators, or other heavy equipment. On the first day that heavy or loud equipment is used in the work area, the Site Safety Officer will conduct a noise survey to determine the radius from the source at which the Cal/OSHA permissible exposure limit time weighted average of 90 decibels for an eight-hour day would be exceeded if hearing protection were not employed. The Site Safety Officer will then designate this area with flags, tape or other appropriate means. During daily meetings workers will be informed of the location of the designated area and of any changes that may occur from day to day. If the same equipment is used from day to day, the Site Safety Officer may measure the distance in linear feet within which hearing protection is necessary and reestablish that distance each time the equipment is moved (as with excavating or trenching).

   The nearest residence is approximately 0.5 miles from the nearest excavation area. Proposed project activities will be conducted during normal work hours of 7:00 a.m. to 6:00 p.m. over one week. Richmond noise standard requires that the level of noise should not exceed 75 dBA at the residential boundary. It is anticipated that the noise levels at the proposed project will be less than significant.

b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

   As noted in the Project Description and throughout this Initial Study analysis, proposed project activities include excavation, loading into bins, treatment with cement, hauling treated material off-site, and backfilling of clean soil as part of the overall remediation of ESM. There will be some ground shaking due to the above noted activities; however, they are not anticipated to be excessive. Proposed project activities will be conducted during normal business hours i.e. between 7:00 a.m. and 6:00 p.m. over the one week; therefore, it is not anticipated that the identified work activities will result in a significant impact.

c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

   As noted in subsections (a) and (b) above, the proposed project activities will be conducted over a short period of time and during normal business hours; therefore, there will not be a substantial permanent increase in the ambient noise levels in and around the project site.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

   As noted above in the Setting portion of this section, there are a number of industrial business activities around the project site that contribute to the ambient noise levels on a daily basis. Project activities proposed for this RAW will not result in substantial noise levels above the current setting; therefore, the relative impacts will be less than significant.

Specific References (a, b, c, etc):

a) Draft Removal Action Workplan October 2005 Appendix D; City of Richmond Noise Standard, Section 9.52.110
b) Ibid.

c) Ibid.
d) Ibid.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

12. Population and Housing

Project activities likely to create an impact:
None. The purpose of the Remedial Action Workplan is to address the remediation of ESM, the scope of which does not include the future development of the Zeneca Site or ESM. Therefore no further analysis is deemed necessary.

Description of Environmental Setting:

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Specific References (list a, b, c, etc):

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

13. Public Services

Project activities likely to create an impact:
- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.
- Habitat creation and enhancement

Description of Environmental Setting:
The ESM is located within the jurisdiction of the City of Richmond (City). Local services such as fire and police protection are provided by the City.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

   No public services are anticipated during this proposed project. Due to the short duration of the construction-related activities at the site, the proposed project will not affect the community access to existing services nor will it result in

additional need for public service. The RAW contains a Health and Safety Plan which establishes procedures that workers and management staff are required to follow in the event of an emergency on-site.

- Fire protection - In the event of a fire, personnel will contact the local fire department immediately by dialing 911. When representatives of the fire department arrive, the Site Safety Officer (SSO) or designated representative will advise the commanding officer of the location, nature and identification of hazardous materials on site.

  All vehicles and equipment will contain fire extinguishers as required by OSHA regulations. Additionally, 10-pound Type ABC Fire Extinguishers will be located within the immediate work area so that the maximum travel distance does not exceed 75 feet. Gasoline and diesel will not be used as a cleaning solvent or for any purpose other than to power vehicles. Trash and debris will be kept to a minimum and emergency phone numbers will be posted at the work areas. In the event of a fire the area will be evacuated, the local fire department will be notified, and the Health and Safety Officer will notify emergency response personnel. Therefore, given the provisions of the Health and Safety Plan, which is part of the proposed project, it is not anticipated that local government facilities or services will be altered due to implementation of the proposed project.

- Police protection - The Health and Safety Plan also includes measures to maintain control of access to the site. Procedures to maintain security at the Zeneca Site and ESM will be followed throughout implementation. The work area will be barricaded by tape, warning signs or other appropriate means. Pertinent equipment or machinery will be secured and stored safely. Access inside the specified work area will be limited to authorized personnel. Only authorized personnel will be admitted to the work site. Personnel entering the work area will be required to sign the signature page of the Health and Safety Plan indicating they have read and accepted the practices outlined in the plan. Therefore, given the security measures to be employed throughout implementation of the project, it is not anticipated that local government security agencies will be altered.

- Schools - There are no schools in the proposed project site area that will be impacted by the proposed project activities. There is an after school tutoring program which is managed in a building in the upland area of the Zeneca Site. Neither staff nor students are allowed to leave the building during the sessions. Additionally, the egress from the building does not take them into the area where construction activities will occur. Therefore, given the security measures to be employed throughout implementation of the proposed project, it is not anticipated that local government security agencies will be altered.

- Parks - The ESM is a 10-acre tidal marsh partly on East Bay Regional Park District property north of the San Francisco Bay shoreline. The ESM is currently fenced by a 4-foot-high park fence along the southern and eastern edges of the project site. The Bay Trail runs along the southern boundary of the Zeneca Site and will not be impacted by the proposed project activities. Therefore, given the security measures to be employed throughout implementation of the proposed project, it is not anticipated that local government security agencies will be altered.

- Other public facilities - Not applicable to the proposed project.

Specific References (list a, b, c, etc):

a) Removal Action Work Plan October 2005, Appendix D

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

14. Recreation

Project activities likely to create an impact:
As noted in Aesthetics Section and in the Public Services Section, ESM is partly on the East Bay Regional Park District property north of the San Francisco Bay shoreline. However, none of the proposed project activities will increase the use of parks in existence around the project site area, nor will the project require construction or expansion of recreation

facilities. The purpose of the RAW is to remediate and restore the ESM. Therefore, no further analysis is deemed necessary.

Description of Environmental Setting:

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Specific References (list a, b, c, etc):

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

15. Transportation and Traffic

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.

Description of Environmental Setting:

Access to the Site is from Meade Street onto S. 47th Street. Trucks will enter and exit Interstate 580 at Regatta Blvd. Meade Street runs parallel to I-580. Traffic along this stretch of road is characterized by routine traffic for industrial businesses and for the University of California Richmond Field Station. Generally, work activities related to the business and the Richmond Field Station are conducted between the hours of 8:00 a.m. – 6:00 p.m. each day. The industrial businesses primarily use S. 49th, S. 50th and S. 51st Streets and access I-580 at Bayview Exit (near 51st Street).

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

   Meade Street is a two lane road. Due to the short duration of the project, approximately one week, and the limited number of vehicles trips (no more than 80 trucks over the week and approximately 20 private vehicle trips per day), no significant increase in traffic load is expected to occur. The transportation plan prohibits the use of the Bayview Exit near the industrial businesses. Therefore, no significant increase in traffic load is expected to occur.

b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

   Refer to the response above. Therefore, it is not anticipated that the proposed project will exceed the established level of service for this area.

c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

The transportation routes for soil leaving the site consists of all major roadways and highways. The trucks will enter and leave the Zeneca Site through S. 47th Street via Meade Street to Regatta Boulevard and I-580. The Regatta entrance/exit onto I-580 is less than 0.5 miles to the west of the Zeneca Site.

d. Result in inadequate emergency access.

As noted in subsections (a) and (b), the truck routes were established using the identified streets and routes in an effort to minimize the overall impact as it relates to traffic congestion and to maximize open access to and from the proposed project site. This plan incorporates the need for access during potential emergency situations; therefore, the proposed plans will provide adequate emergency access including clear access to the nearest freeway (I-580).

e. Result in inadequate parking capacity.

All vehicles and equipment will be stored and operated on the upland portion of the Zeneca Site for the duration of the proposed project. Adequate parking is available on-site for construction workers during remediation activities.

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

The proposed truck routes were designed to minimize the overall impact to surrounding businesses and local residential areas. No bus turnouts or bicycle racks or lanes will be impacted through the use of the proposed truck routes.

Specific References (list a, b, c, etc):

a) Draft Removal Action Workplan, October 2005, Appendix D.
b) Draft Removal Action Workplan, October 2005, Appendix D.
c) Draft Removal Action Workplan, October 2005, Appendix D.
d) Draft Removal Action Workplan, October 2005, Appendix D.
e) Draft Removal Action Workplan, October 2005, Appendix D.
f) Draft Removal Action Workplan, October 2005, Appendix D.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

16. Utilities and Service Systems

Project activities likely to create an impact:

- Excavation and transportation of contaminated sediments to a licensed Class II landfill facility.
- Placement of excavated sediment in 20 cubic yard-lined bins temporarily stored on site.
- Mixing of excavated sediments with cement.
- Grading the excavated areas with clean fill located adjacent to the excavation point.

Description of Environmental Setting:

In 2002, a new storm drain was installed underneath the levee between the lagoons (located north of the ESM) and three culverts were replaced with two new corrugated iron overflow culverts set at the identical elevation as the removed pipes. The new storm-water management system has two outfalls, Outfall 001 and Outfall 002, which discharge to ESM and Outfall 003, which discharges directly to San Francisco Bay. Outfall 001 is located at the Lower Lagoon near Carlson Creek. Outfall 002 is located between the lagoons. Storm-water runoff from the upland area of the Zeneca Site (not part of this Project) is directed to the Upper Lagoon through the upland Low-Flow Intercept System (LFIS), which is designed to capture first flush rainfall water. Approximately 75 to 85 percent of the storm water from the upland area is directed to the Upper Lagoon through the LFIS. A discharge through the outfalls will occur only when the pumping capacity of the LFIS is exceeded.

Storm-water monitoring is conducted in accordance with the Comprehensive Monitoring Plan (CMP) for the Zeneca Site. Under the CMP, storm-water samples are collected from each outfall during the first storm event of any given month that there is a discharge to ESM or San Francisco Bay from that outfall. Storm-water results are reported with quarterly groundwater monitoring results in quarterly reports submitted to the DTSC and RWQCB.

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Storm-water monitoring is conducted in accordance with the Comprehensive Monitoring Plan (CMP) for the Zeneca Site. Under the CMP, storm-water samples are collected from each outfall during the first storm event of any given month that there is a discharge to ESM or San Francisco Bay from that outfall. Storm-water results are reported with quarterly groundwater monitoring results in quarterly reports submitted to the DTSC and RWQCB.

As part of the remediation initiated last year, the areas requiring excavation have been isolated from areas where surface water is connected to San Francisco Bay. Once the area is excavated and backfilled, the berms isolating the areas will be removed and tidal inundation of the entire marsh can be re-established. Therefore, no exceedances to San Francisco Bay are projected during the implementation of this removal.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

As noted in the Hydrology and Water Quality section and in this Section's Environmental Setting, a new storm water system has been installed at the Zeneca Site. Storm water results are reported quarterly to the DTSC and the RWQCB; therefore, implementation of the proposed project will not require new wastewater treatment facilities or expansion of existing facilities.

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Please see the Environmental Setting for this section and the response to subsection (b).

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

The proposed project will use small amounts of water for the dust control. The water needed will come from existing local water supplies.

e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

Due to the scope of the proposed project, excavation, backfilling, treatment of contaminated sediments and off-site disposal, the proposed project will not create any demand for wastewater services.

f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

The total estimated volume of contaminated soils to be excavated for off-site disposal is 500 cubic yards. It is estimated that an additional 10 percent of cement would be required to solidify the material prior to shipment. Therefore, 550 cubic yards would need to be shipped off-site. Treated sediment will be transported either to Keller Canyon or Altamount Landfill, licensed Class II landfill facilities. The landfills have sufficient capacity to accommodate the materials. If the inclement weather occurs, it is anticipated more material will be shipped to Altamount Landfill.

g. Comply with federal, state, and local statutes and regulations related to solid waste.

Sampling has documented that the material is not a hazardous waste.

Specific References (list a, b, c, etc):

a) RAW October 2005, Appendix B and Section 9
b) Ibid.
c) Ibid.
d) Ibid.
e) Ibid.
f) Ibid.
g) Ibid.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

17. Mandatory Findings of Significance

Analysis of Potential Impacts. Describe to what extent project activities would:

a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

   As noted in the Biological Impacts Section of this Initial Study analysis, there is a potential for impacting flora native to the marsh area and certain fauna, specifically the California clapper rail, which is known to inhabit this area although the actual numbers are not definitively known. The RAW is incorporating certain control measures designed to keep the harassment, harm or mortality of the species to Less Than Significant Levels to No Impact levels (see Section 4. Biological Resources and RAW October 2005 Appendix B).

b. Have impacts that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

   The project activities proposed for the remediation of the ESM, the present project, will be conducted during the months of October to December 2005 in an effort to provide the least amount of disturbance of the California clapper rail species (i.e. not conducted during its breeding season); therefore the subject project remediation will be concluded and restoration and site monitoring will be the only activities remaining once the contaminated soil has been removed from ESM.

   Removal of contaminated sediments and restoring the tidal marsh will have a beneficial long-term effect. The remediation will be conducted under an approved RAW. The proposed activities will be performed in accordance with all applicable laws, regulations and ordnances. Eleven of the 17 Environmental Resources evaluations concluded that the proposed project would result in "no impact". The remaining six, (Air Quality, Biological Resources, Hazardous & Hazardous Materials, Hydrology & Water Quality, Noise, and Transportation & Traffic), analyses demonstrate the potential for "less than significant impact". The cumulative effect of less than significant impact from excavation activities on air quality, water quality, noise and transportation is negligible and short-term; therefore, the proposed project will not result in any significant cumulative impacts.

c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

   The findings within this Initial Study support the conclusion that impacts on public health and to the environment would be less the significant.

Specific References (list a, b, c, etc): Draft Removal Action Workplan, October 2005

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

V. FINDING OF DE MINIMIS IMPACT TO FISH, WILDLIFE AND HABITAT ***(Optional)***

Prepared only if a Finding of De Minimis Impact to fish, wildlife and habitat is proposed in lieu of payment of the Department of Fish and Game Notice of Determination filing fee required pursuant to section 711.4 of the Fish and Game Code.

Instructions

A finding of "no potential adverse effect" must be made to satisfy the requirements for the Finding of De Minimis Impact as required by title 14, California Code of Regulations, section 753.5. "No potential adverse effect" is a higher standard than "no significant impact" and the information requested to provide substantial evidence in support of a "no potential adverse effect" is not identical in either its standard or content to that in other parts of the Initial Study.

In the *Explanation and Supporting Evidence* section below, provide substantial evidence as to how the project will have **no potential adverse effect** on the following resources:

a) Riparian land, rivers, streams, watercourse, and wetlands under state and federal jurisdiction.

b) Native and non-native plant life and the soil required to sustain habitat for fish and wildlife.

c) Rare and unique plant life and ecological community's dependent on plant life.

d) Listed threatened and endangered plant and animals and the habitat in which they are believed to reside.

e) All species of plant or animals as listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulation adopted there under.

f) All marine and terrestrial species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.

g) All air and water resources the degradation of which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air and water.

Explanation and Supporting Evidence

(Note: *Relevant portions of the Initial Study may be referenced where appropriate)*

Finding

Based on the explanation and supporting evidence provided above, DTSC finds that the project will have no potential for adverse effect, either individually or cumulatively on fish and wildlife, or the habitat on which it depends, as defined by section 711.2 of the Fish and Game Code.

VI. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Initial Study:

☒ I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED DECLARATION will be prepared.

☐ I find that the proposed project MAY HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

DTSC Project Manager Signature		Date
Barbara J. Cook	Branch Chief	(510) 540-2122
DTSC Project Manager Name	DTSC Project Manager Title	Phone #

DTSC Branch/Unit Chief Signature		Date
Barbara J. Cook	Branch Chief	(510) 540-2122
DTSC Branch/Unit Chief Name	DTSC Branch/Unit Chief Title	Phone #

ATTACHMENT A

INITIAL STUDY REFERENCE LIST

For

Zeneca/Former Stauffer Chemical Company Site (Zeneca Site)
(Project Name)

1. Draft Removal Action Work Plan prepared by LFR, October X, 2005
2. BAAQMD, Regulations 2, 6, 7, 8, and 9
3. BAAQMD Hand Book on CEQA Guidelines 1999
4. BAAQMD, telephone discussion with Doug Kolozsvari, October 15, 2005.
5. California Air Resources Board Web Site
6. California Dept. of Transportation, District 4 website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/ccosta.htm
7. California Natural Diversity Data Base, 2004, Rarefind Report
8. CalSites list, Department of Toxic Substances Control, Site Mitigation and Brownfields Reuse Program
9. City of Richmond Lighting and Glare Ordnance – 15.04.840.040
10. City of Richmond ordnance, Odors 15.04.840.030
11. City of Richmond Noise Standard, Section 9.52.110
12. City of Richmond General Plan, Vol. Two, Technical Appendix, August 1994;
13. City of Richmond, telephone message from Richard Mitchell on cultural resources, August 16, 2005
14. Department of Conservation Web Site, Geological Survey – Naturally Occurring Asbestos
15. Federal Endangered Species Act
16. Governor's Office of Planning and Research, "Addressing Naturally Occurring Asbestos in CEQA Documents."
17. Native American Heritage Commission, letter dated August 2, 2005
18. United States Geologic Survey, http://wrgis.wr.usgs.gov/

NEGATIVE DECLARATION

Submitting: ☒ **Draft**
☐ **Final**
☐ **Mitigated Negative Declaration**

Project Title: Zeneca/Former Stauffer Chemical Company Site (Zeneca Site)

State Clearinghouse Number:

Contact Person: Barbara Cook Phone # (510) 540-2122

Project Location (*Include County*):

1391 South 49th Street
Richmond, Contra Costa County

Project Description:

The project involves the implementation of activities specified in the Removal Action Work Plan (RAW) including the excavation of 500 cubic yards of sediments with elevated levels of metals, PCB, and pesticides; treatment of the sediments to remove excess water; and disposal of the treated sediments at a properly licensed disposal facility. The sediments will be treated with 10% cement in 20 cubic yards lined covered bins. The area covered by this phase of the project is less than 0.2 acres of tidal marsh. Additionally, this area plus another 4+ acres involves the restoration of the tidal salt marsh in accordance with existing approved permits.

The RAW has been prepared in accordance with California Health and Safety Code, Section 25356.1 (h).

Dust control measures will be utilized while excavation and treatment activities are occurring, as necessary to minimize the amount of dust generated. Contractors implementing the remedial alternatives will meet the requirements for training in Cal/OSHA regulations. A health and safety plan has been prepared that addresses worker health and safety prior to implementation of remedial activities. Transportation routes have been developed to ensure that haulers are following a specified route to reduce truck traffic in areas where businesses are operating. Decontamination procedures have been prepared that address processes to remove any contaminants from equipment and trucks before leaving the property.

Findings of Significant Effect on Environment:
(A copy of the Initial Study which supports this finding should be attached.)

Based on the attached Initial Study, the Department of Toxic Substances Control has determined that implementation of the RAW for the Zeneca Site could not have any significant impacts on the environment.

Mitigation Measures:

DTSC has determined that the project does not require any additional mitigation measures beyond those incorporated as part of this project.

DTSC Branch Chief Signature		Date
Barbara Cook		(510) 540-3843
DTSC Branch Chief Name	DTSC Branch Chief Title	Phone #

NOTICE OF COMPLETION & ENVIRONMENTAL DOCUMENT TRANSMITTAL

Mail to: State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044 (916) 445-0613

SCH # _____

Project Title: Zeneca/Former Stauffer Chemical Company Site (Zeneca Site)
Lead Agency: Department of Toxic Substances Control Contact Person: Barbara Cook
Street Address: 700 Heinz Avenue Suite 200 Phone: (510) 540-2122
City: Berkeley Zip Code: 94710 County: Alameda

Project Location:
County: Contra Costa City/Nearest Community: Richmond
Cross Streets: South 49th Street and East Montgomery Avenue Zip Code: 94804 Total Acres: 0.2
Assessor's Parcel No: 560010046 Section: _____ Twp: _____ Range: _____ Base: _____
Within 2 miles: State Hwy #: 580 Waterways: San Francisco Bay
Airports: _____ Railways: Southern Pacific Schools: Stege, King, Wilson, Coronado, and Castro Elementary, Portola Middle School, Kennedy, Albany, and El Cerrito High Schools

Document Type:

CEQA:	☐ NOP	☐ Supplement/Subsequent EIR	**NEPA:**	☐ NOI	**Other:**	☐ Joint Document
	☐ Early Cons	(Prior SCH No.) _____		☐ EA		☐ Final Document
	☒ Neg Dec	☐ Other _____		☐ Draft EIS		☐ Other _____
	☐ Draft EIR			☐ FONSI		

Action Type:

☐ General Plan Update	☐ Master Plan	☐ Prezone	☐ Annexation
☐ General Plan Amendment	☐ Planned Unit Development	☐ Use Permit	☐ Redevelopment
☐ General Plan Element	☐ Site Plan	☐ Land Division (subdivision)	☐ Costal Permit
☐ Community Plan	☐ Rezone	☒ Other: Removal Action Workplan	
☐ Specific Plan		(Hazardous Waste Removal Action, Parcel Map, Tract Map, etc.)	

Development Type:

☐ Residential:	*Units* _____	*Acres* _____			☐ Water Facilities:	*Type:* _____	*MGD:* _____		
☐ Office:	*Sq. ft.* _____	*Acres* _____	*Employees* _____		☐ Transportation:	*Type:* _____			
☐ Commercial:	*Sq. ft.* _____	*Acres* _____	*Employees* _____		☐ Mining:	*Mineral:* _____			
☐ Industrial:	*Sq. ft.* _____	*Acres* _____	*Employees* _____		☐ Power:	*Type:* _____	Watts: _____		
☐ Educational:					☐ Waste Treatment:	*Type:* _____			
☐ Recreational:					☐ Hazardous Waste:	*Type:* _____			
					☐ Other: _____				

Funding (approx.): Federal $ State $ Total $

Project Issues Discussed in Document:

☐ Aesthetic/Visual	☐ Flood Plain/Flooding	☐ Schools/Universities	☒ Water Quality
☐ Agricultural Land	☐ Forest Land/Fire Hazard	☐ Septic Systems	☐ Water Supply/Groundwater
☒ Air Quality	☐ Geologic/Seismic	☐ Sewer Capacity	☒ Wetland/Riparian
☒ Noise	☐ Minerals	☒ Wildlife	☐ Archeological/Historical
☐ Coastal Zone	☐ Solid Waste	☐ Growth Inducing	☐ Population/Housing Balance
☐ Drainage/Absorption	☒ Toxic/Hazardous	☐ Landuse	☐ Soil Erosion/Compaction/Grading
☐ Economic/Jobs	☐ Public Services/Facilities	☒ Traffic/Circulation	☐ Cumulative Effects
☐ Fiscal	☐ Recreation/Parks	☐ Vegetation	☐ Other: _____

Present Land Use/Zoning/General Plan Designation: Heavy Industrial

Project Description: The Department of Toxic Substances Control (DTSC) is considering approval of a Removal Action Work Plan (RAW) to complete remediation activities required in portions of the East Stege Marsh (ESM) at the Zeneca Site to address contaminated sediments and restore the area back to tidal salt marsh

Reviewing Agencies Checklist:

- ☐ **Resources Agency**
- ☐ Boating / Waterways
- ☐ Coastal Commission
- ☐ Costal Conservancy
- ☐ Colorado River Board
- ☐ Conservation
- ☒ Fish & Game
- ☐ Forestry & Fire Protection
- ☐ Office of Historic Preservation
- ☐ Parks & Recreation
- ☐ Reclamation Board
- ☒ SF Bay Conservation and Development Commission
- ☐ Water Resources (DWR)

- **Business, Transportation & Housing**
- ☐ Aeronautics
- ☐ California Highway Patrol
- ☐ Caltrans District #
- ☐ Department of Transportation Planning (headquarters)
- ☐ Housing and Community Development
- ☐ **Food and Agriculture**
- **Health & Welfare**
- ☒ Health Services Env. Health Investigation Branch
- **State & Consumer Services**
- ☐ General Services
- ☐ OLA (Schools)

- **Environmental Protection Agency**
- ☒ Air Resources Board
- ☐ California Waste Management Board
- ☐ SWRCB: Clean Water Grants
- ☐ SWRCB: Delta Unit
- ☐ SWRCB: Water Quality
- ☐ SWRCB: Water Rights
- ☒ Regional WQCB # SF

- **Youth & Adult Corrections**
- ☐ Corrections

- **Independent Commissions & Offices**
- ☐ Energy Commission
- ☐ Native American Heritage Commission
- ☐ Public Utilities Commission
- ☐ Santa Monica Mountains Conservancy
- ☐ State Lands Commission
- ☐ Tahoe Regional Planning Agency

- ☐ Other: _____

Public Review Period (to be filled out by lead agency)

Starting Date 10/10/2005 Ending Date 11/9/2005

_____ _____
Signature of Lead Agency Representative Date

Barbara Cook | Supervising Hazardous Substances Engineer II | (510) 540-2122
Representative's Name | Representative's Title | Phone #

FOR SCH USE ONLY			
Date Received at SCH:		Applicant:	
Date Review Starts:		Consultant:	
Date to Agencies:		Contact Phone #:	( )
Clearance Date:		Address:	
Notes:			

** NOTE: Clearinghouse will assign identification numbers for all new projects. If SCH number already exists for a project (e.g., from a Notice of Preparation or previous draft document) please enter the SCH number in the box located in upper right corner of this document.*